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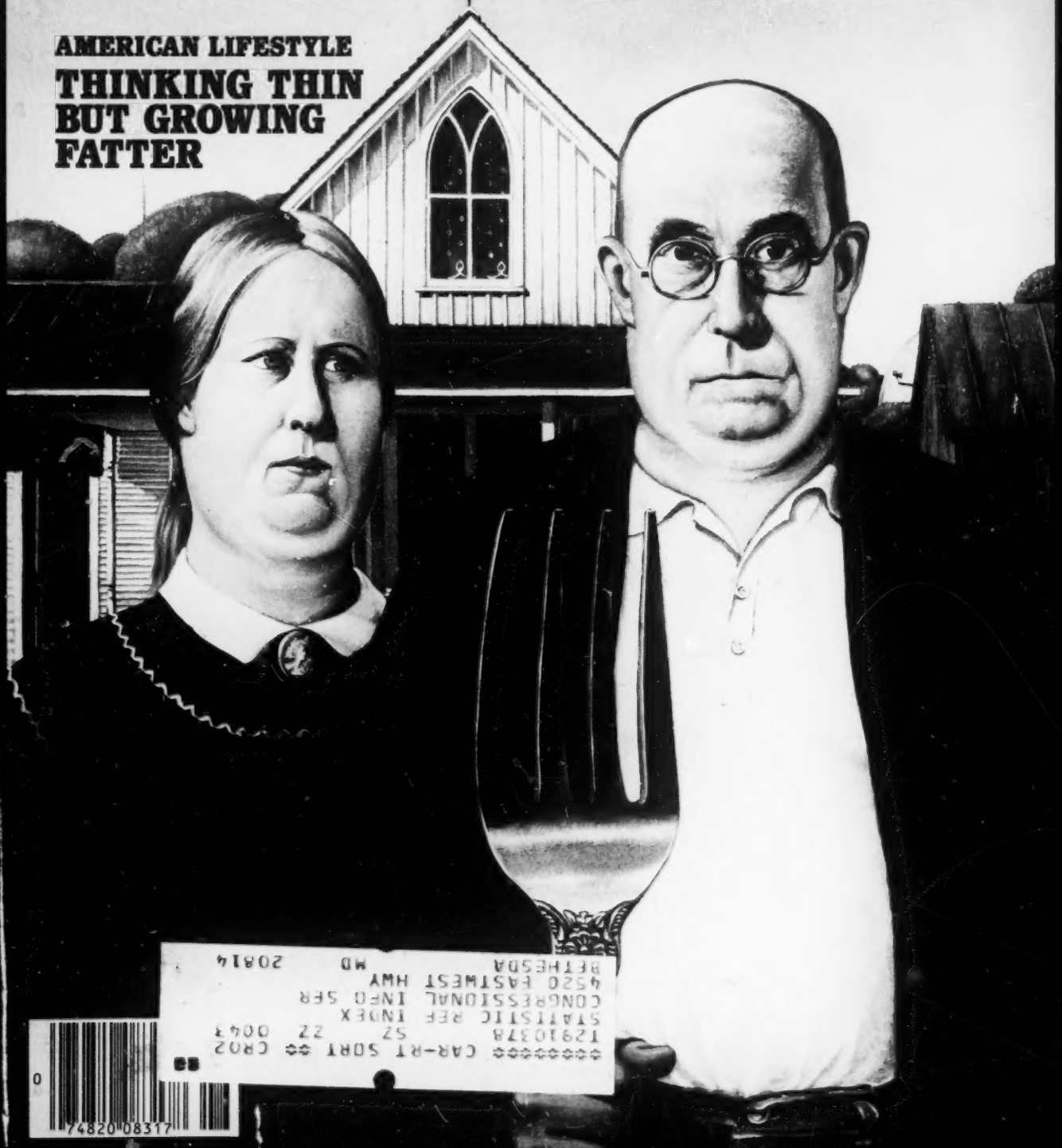
NOVEMBER 17, 1986 THREE DOLLARS FIFTY CENTS

THE BIGGEST PRIVATE COMPANIES IN AMERICA

Forbes

AMERICAN LIFESTYLE

THINKING THIN BUT GROWING FATTER



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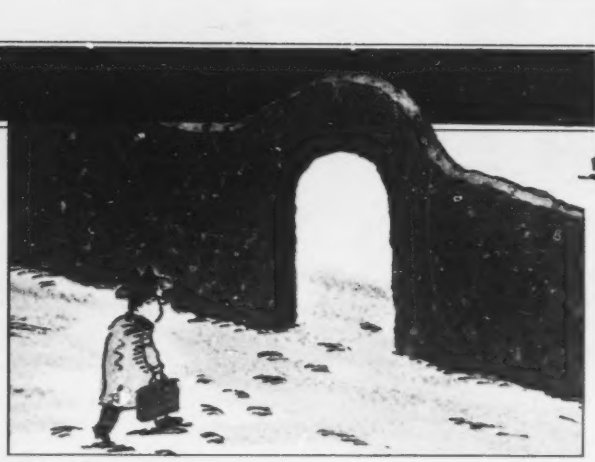

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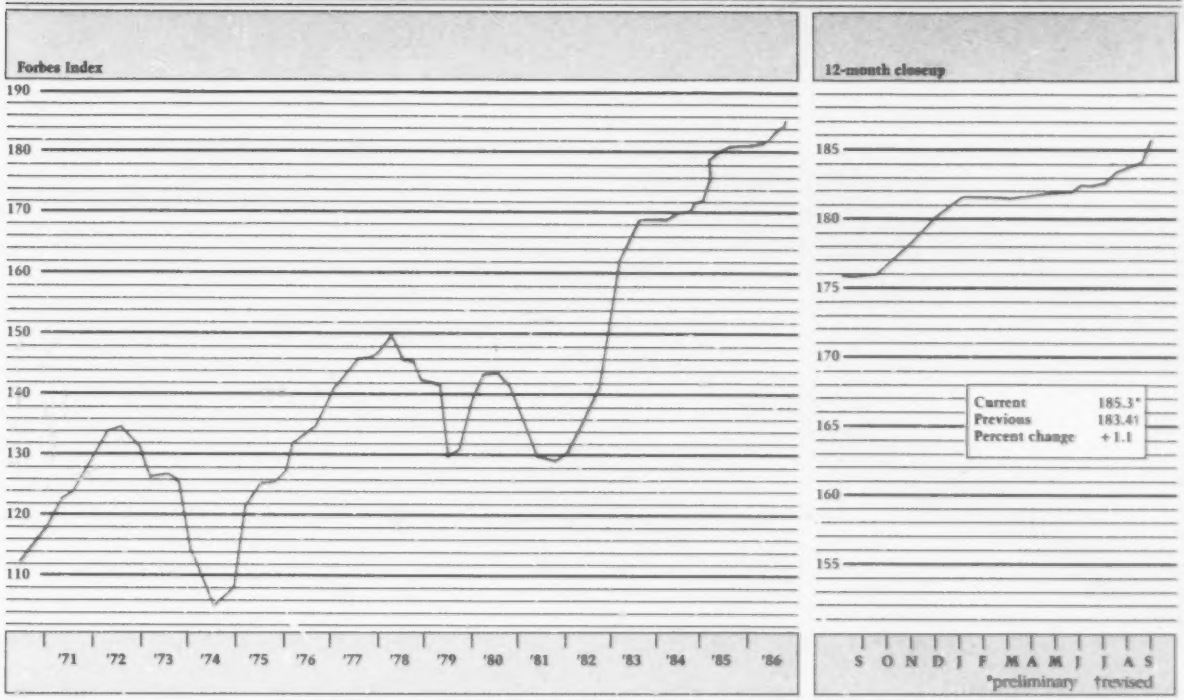
The Forbes Index



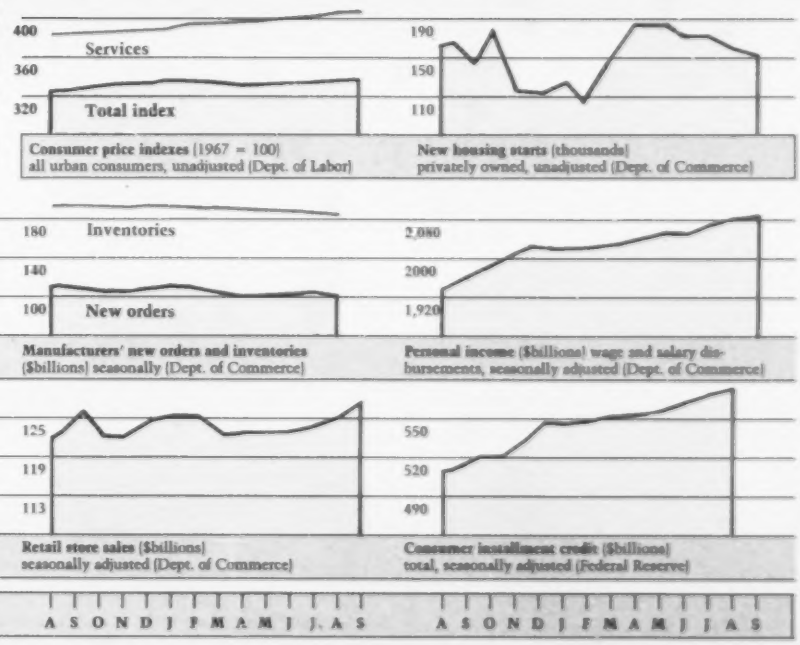
Borrowing from the future. The Forbes Index shot up 1.1% during the latest reporting period, the biggest month-to-month jump since August of 1985. Why? Generous auto financing incentives from Detroit pushed up retail sales 4.7% from August to September. This was the largest monthly increase in over three years—with two related, unpleasant side effects. Not only is this sales pace unlikely to be maintained, but it has also pushed up the level of consumer debt.

The rest of the economy seems to be improving. Industrial production and personal income went up by 0.2% and 0.3%, respectively, from August to September. New housing starts decreased by 6.5% in September but still remain 5.2% higher than they were a year ago.

The Forbes Index Components

The Forbes Index is a measure of U.S. economic activity composed of eight equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, the level of new orders for durable goods compared with manufacturers' inventories, total retail sales, new housing starts, personal income, total consumer installment credit.

To measure these eight elements, FORBES monitors ten series of U.S. government data. The last 14 months' data for each series are presented at right.


400
Services
360
320
Total index
Consumer price indexes (1967 = 100) all urban consumers, unadjusted (Dept. of Labor)
190
150
110
New housing starts (thousands) privately owned, unadjusted (Dept. of Commerce)
126
124
122
Industrial production index (1967 = 100) seasonally adjusted (Federal Reserve)
180
Inventories
140
100
New orders
Manufacturers' new orders and inventories ($billions) seasonally (Dept. of Commerce)
2,080
2000
1,920
Personal income ($billions) wage and salary disbursements, seasonally adjusted (Dept. of Commerce)
250
350
450
Unemployment claims average for month (thousands) seasonally adjusted (Dept. of Labor)
125
119
113
Retail store sales ($billions) seasonally adjusted (Dept. of Commerce)
550
520
490
Consumer installment credit ($billions) total, seasonally adjusted (Federal Reserve)
A S O N D J F M A M J J A S
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Who needs the stock exchange? A thriving collection of large companies seems to do well enough without it. And you can get plenty rich off a private company.

The shadow economy

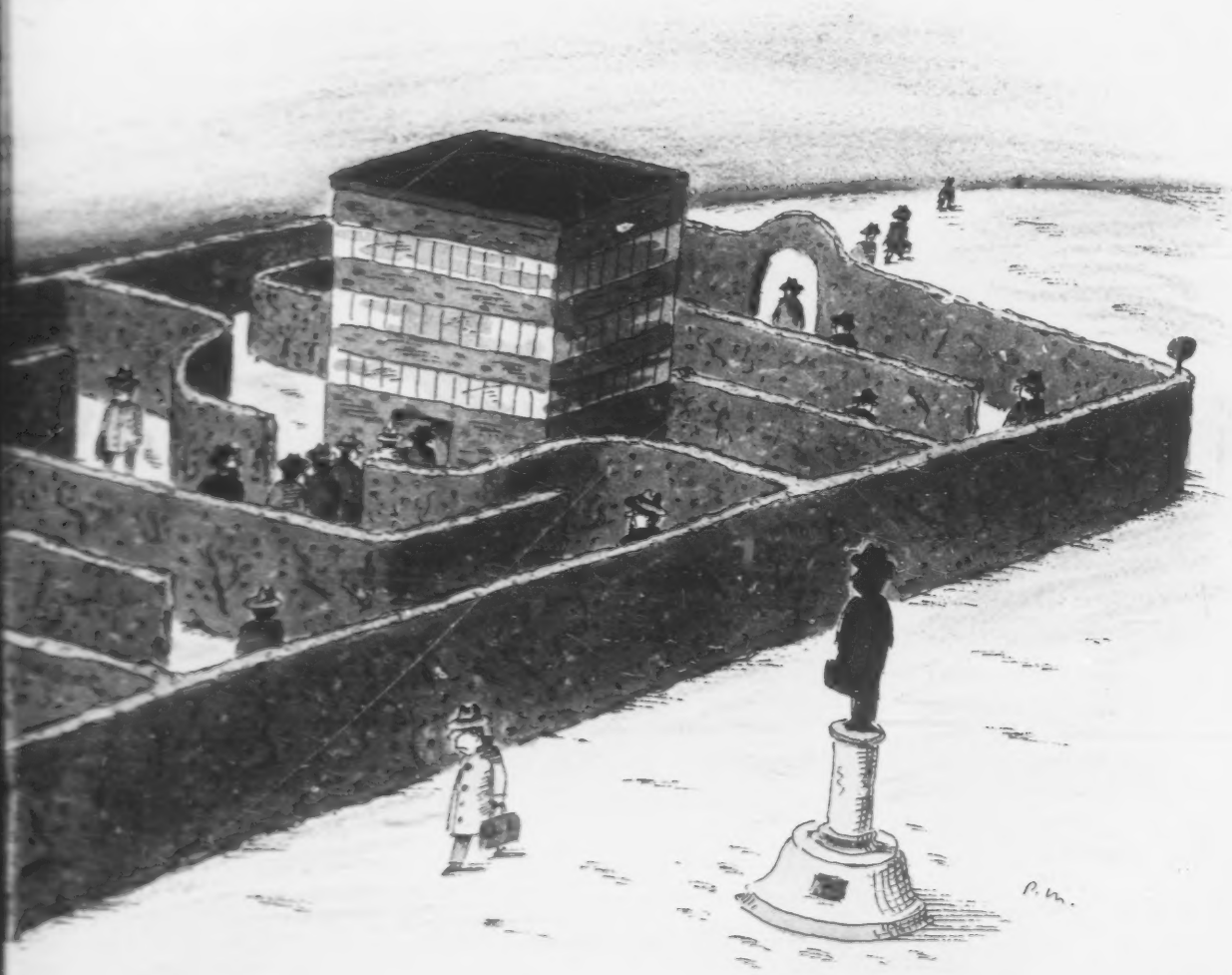
By Steve Kichen
and Michael Ozanian

WHAT WITH RAIDERS, foreign competition and disinflation, publicly owned industry is on the defensive. To stay competitive, big goods-producing corporations are often forced to shrink. Employment among the largest public companies is on a downward trend. Net of inflation, their combined sales were off slightly last year.

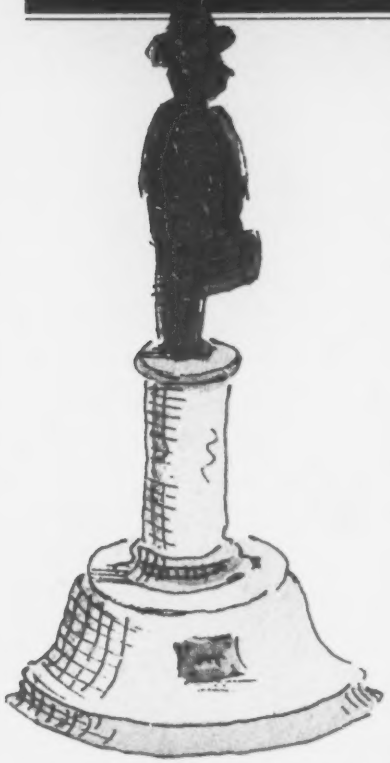
Is this shrinkage representative of the whole economy? Not quite. A somewhat different picture emerges in the lesser-known world of private corporations, which range from $32 billion Cargill down to the corner dry cleaner. They seem to be holding their own in this turbulent economy. All told, they account for a third of U.S. production. The combined sales estimates for the largest 400 of them come to $390 billion for 1985, an 11% gain net of inflation from the year earlier. Employment also went up, to 2.8 million.

There is a simple reason for this. Private business is strong in the service sector, the growing part of the economy. It isn't as well represented in the goods-producing sector, the one most exposed to competition from cheap labor abroad.

Look down the list, which begins on page 193. Distributors, accountants, engineers, brokers, ad agencies and publishers predominate; manufacturers are scarce. There is no private airline of any size, no utility, few banks and insurers, one railroad.



The Largest Private Companies in the U.S.



A half-century ago the giants of American capitalism were the big users of fixed capital—rails, steels, utilities—and they were (and are) publicly traded because they need access to public equity markets. Nowadays wealth is as likely to be measured in mailing lists or franchise rights as in rolling stock. And in the accumulation of intangible capital, private corporations are at no special disadvantage to public companies.

Running a private business is also one of the handiest ways to get rich in our society. No fewer than 64 large private companies have proprietors that show up on The Forbes Four Hundred list of rich Americans. Half the 26 billionaires in the U.S. derive their wealth from private companies. It seems that John Kenneth Galbraith's 1960s-era model of an economy of corporate giants, in complete control of their destiny and not answerable to their anonymous owners, was never entirely true, and it is even less true today.

Why are so many large corporations private? Some never needed public capital. Some used to be public and went private to capitalize on the tax advantages of debt financing. And some simply value the flexibility of not having to answer to outsiders. Says Roger Fridholm, president of $1.5 billion Stroh Brewery, the U.S.' largest private brewer: "We don't have to let the competition know how we are doing." Adds Cruse W. Moss, chairman of General Automotive, which acquired Grumman's Flxible bus operations: "We can pursue opportunites that get bogged down in a public company."

Private companies, it seems, can sometimes do it cheaper or better. Hence the rash of restructurings by diversified companies, unloading troublesome or misunderstood divisions that are better left to their own devices.

First Brands, formerly Union Carbide's consumer products group (Prestone antifreeze and Glad Bags), became independent in July. "The buyout improved morale," says Daniel Raymond, First Brands' secretary. Ralston Purina sold Foodmaker (operator of Jack in the Box fast-food outlets) to management. Beatrice sold its Avis car-rental unit to Wesray Capital. Relieved of corporate overhead and of the burden of a cumbersome decision-making process, these outfits may well be worth more as private companies than as part of a giant corporate whole.

Going private is sometimes, of course, just a transition before going public again in restructured form. Fred Meyer, a $1.5 billion (sales) retailer taken private five years ago by Kohlberg Kravis Roberts, went public again in October, making $240 million for equity participants. Another KKR deal, Beatrice Cos., won't wait as long. A slimmed-down Beatrice reportedly plans to go public next year, about a year after the company went private in a $6 billion leveraged buyout.

In the past year such big companies as Jack Eckerd (drugstores), Midland-Ross (industrial equipment), Warnaco (clothing) and Sybron (medical equipment) went private. By year's end they will be joined by Safeway Stores, the nation's largest grocery chain, Heck's (department stores), Revere Copper & Brass (metal fabricating) and Viacom International (television) if pending deals go through.

In the other direction? Bear, Stearns and Morgan Stanley offered stock because they needed additional capital to stay competitive in securities trading. The private companies, meanwhile, make a shopping list for takeover artists. "Your private list is valuable for investors looking to buy companies," says Andrew Galef, chairman of three companies on our list: Warnaco, Exide (batteries) and Magnetek (electronic equipment).

So we're not saying that the big private corporation is about to disappear. If the stock market goes up again, making P/E ratios irresistible for people needing to raise capital or wanting to cash in, there may even be a rash of private firms going public. Even so, the eclipse of the private firm is now over: In the new economy—no longer capital-intensive but knowledge-intensive—the private company has a bright future. ■

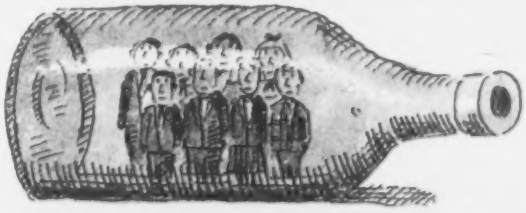
What's a private company?

In this second annual survey of private business, we rank by sales the largest American corporations whose stock is not widely traded: Either they have too few shareholders (generally 500) to file financial reports with the SEC, or they file but the stock is not available to the public. Most of the entries in the table fall in the former category. The exceedingly profitable United Parcel Service (1985 net income, $568 million) and the secretive defense contractor Science Applications International are among those that fall in the latter category.

Affiliates of public companies (for example, Caltex, jointly owned by Chevron and Texaco), mutuals and cooperatives (Prudential Insurance, Gold Kist) and foreign-owned companies are excluded. Sales figures are for the most recent fiscal year available, confirmed in most cases by the companies.

In other cases we relied for estimates on whatever sources were available: government filings, competitors, dissident shareholders. Perrin Long, the financial industry analyst at Lipper Analytical Services, provided estimates for brokerage firms.

Rank this year	Rank last year	Company/business	Sales (millions)	Employees	Chief executive	City, state
1	1	**Cargill**/commodity trading	$32,000	46,000	Whitney MacMillan	Minnetonka, MN
2	4	**Koch Inds**/petroleum and natural gas	16,000	6,500	Charles Koch	Wichita, KS
3	2	**Continental Grain**/commodity trading	14,000	12,000	Michel Fribourg	New York, NY
4	■	•**Beatrice**/food and consumer products	11,858	100,000	Donald P Kelly	Chicago, IL
5	3	**Apex Oil**/oil refining, transporting and trading	8,000e	10,000	Anthony Novelly	St Louis, MO
6	7	**United Parcel Service**/package delivery	7,686	150,000	John W Rogers	Greenwich, CT
7	8	**Mars**/candy	7,000e	22,000	Forrest E Mars Jr	McLean, VA
8	6	**Bechtel Group**/engineering, construction	6,800	23,000	Stephen D Bechtel Jr	San Francisco, CA
9	52	**Peter Kiewit Sons**/commercial construction	4,400	31,000	Walter Scott Jr	Omaha, NE
10	■	•**RH Macy**/department stores	4,368	55,000	Edward S Finkelstein	New York, NY
11	12	**Louis Dreyfus**/grain exporting	4,000	650	GL Dreyfus	Stamford, CT
12	■	•**Swift Independent Holdings**/meatpacking	4,000[1]	9,200	Edward Cox Jr	Dallas, TX
13	219	•**Goldman, Sachs & Co**/investment banking and brokerage	3,600e	5,100	John L Weinberg	New York, NY
14	9	•**ARA Services**/food, transport and health services	3,526e	112,000	Joseph Neubauer	Philadelphia, PA
15	10	**Publix Supermarkets**/grocery stores	3,476	24,000	George W Jenkins	Lakeland, FL



At one time there were hundreds of private family-run breweries. Stroh is the last large one left.

16	11	•**Malone & Hyde**/food wholesaling	3,137	10,778	JR Hyde III	Memphis, TN
17	13	**Carlson Cos**/multicompany	3,125	50,000	Curtis L Carlson	Minneapolis, MN
18	■	**George E Warren**/oil trading	2,846	75	A David Stillman	Boston, MA
19	■	•**Marmon Group**/multicompany	2,767	27,095	Robert A Pritzker	Chicago, IL
20	14	•**Levi Strauss Assoc**/apparel	2,600	35,000	Robert D Haas	San Francisco, CA
21	■	•**Jack Eckerd**/drugstores	2,508	32,400	Stewart Turley	Clearwater, FL
22	■	•**American Financial**/insurance	2,272	45,000	Ronald F Walker	Cincinnati, OH
23	59	**Drexel Burnham Lambert**/investment banking and brokerage	2,200e	8,600	Frederick H Joseph	New York, NY
24	19	**Milliken & Co**/textiles	2,200e	45,000	Roger Milliken	New York, NY
25	22	**Lincoln Property**/real estate devel & mgt	2,100	5,500	A Mack Pogue	Dallas, TX
26	21	•**Pace Industries**/multicompany	2,055	20,200	James W Wilcock	New York, NY
27	17	**Advance Publications**/newspapers, magazines, books	2,030	18,500	SI Newhouse Jr	Staten Island, NY
28	15	**Farley Industries**/multicompany	2,000[2]	22,000	William F Farley	Chicago, IL
29	235	**General Felt Industries**/carpeting, furniture, auto parts	2,000	14,500	Marshall S Cogan	Saddle Brook, NJ
30	■	**H Group Holdings**/multicompany	2,000e	30,000	Jay Pritzker	Chicago, IL
31	18	**SC Johnson & Son**/specialty chemicals	2,000e	11,000	Samuel C Johnson	Racine, WI
32	25	**HE Butt Grocery**/grocery stores	1,900	23,000	Charles C Butt	San Antonio, TX
33	23	•**Rapid-American**/retail stores	1,898	56,500	Meshulam Riklis	New York, NY
34	■	**First Petroleum**/petroleum wholesaling	1,830	170	Alfred Slifka	Waltham, MA
35	30	**Hallmark Cards**/greeting cards	1,680	20,000	Irvine O Hockaday Jr	Kansas City, MO
36	37	**Peat, Marwick, Mitchell & Co**/accounting	1,672	31,700	Larry D Horner	New York, NY
37	38	•**Dominick's Finer Foods**/grocery stores	1,600	14,000	Dominick DiMatteo	Northlake, IL
38	26	**Graybar Electric**/electrical equipment wholesaling	1,600	4,500	James L Hoagland	St Louis, MO
39	56	**Arthur Andersen & Co**/accounting	1,573	29,800	Duane R Kullberg	Chicago, IL
40	28	**Belk Brothers**/department stores	1,500e	22,500	John Belk	Charlotte, NC

■ Not on last year's list. •Went private via leveraged buyout within last six years. e: estimate. [1] Includes figures for Val-Agri acquired in 1986. [2] Includes Farley Apparel ($900 million sales), which may make public offering in near future.

The Largest Private Companies in the U.S.

Rank this year	Rank last year	Company/business	Sales (millions)	Employees	Chief executive	City, state
41	29	•**Dillingham**/construction, maritime trans, ship repair	$1,500	6,100	JJ Casey	San Francisco, CA
42	35	•**First National Supermarkets**/grocery stores	1,500	14,519	Richard J Bogomolny	Maple Heights, OH
43	33	**Hearst Publications**/publishing, broadcasting	1,500e	12,000	Frank A Bennack Jr	New York, NY
44	■	**Stevedoring Group of Am**/stevedoring svcs, food wholesaling	1,500e	5,500	Tom Stewart	Seattle, WA
45	27	**Stroh Brewery**/brewing	1,500	6,000	Peter W Stroh	Detroit, MI
46	36	**Cox Enterprises**/publishing, broadcasting	1,471	15,000	James Robbins	Atlanta, GA
47	39	**Giant Eagle**/food distributing, grocery stores	1,450	11,000	David S Shapiro	Pittsburgh, PA
48	42	**Readers Digest Association**/publishing	1,400	8,000	George V Groune	Pleasantville, NY
49	50	**Steelcase**/office furniture and systems	1,393	15,000	Robert C Pew	Grand Rapids, MI
50	106	**Coopers & Lybrand**/accounting	1,375e	36,243	Peter R Scanlon	New York, NY
51	46	•**Denny's**/restaurants	1,350	52,000	Vern O Curtis	La Mirada, CA
52	■	•**National Gypsum**/building materials	1,340	12,800	John P Hayes	Dallas, TX
53	43	•**Amstar Holdings**/sugar, electrical tools	1,322	7,600	Howard B Wentz Jr	New York, NY
54	44	**Hy-Vee Food Stores**/grocery stores, drugstores	1,300	16,000	Ron Pearson	Chariton, IA
55	41	**McLane**/food wholesaling	1,300	2,000	Brenton McLane Jr	Temple, TX
56	■	•**SCOA Industries**/department stores	1,214	20,000	Herbert H Goldberger	Canton, MA
57	48	**Estée Lauder**/cosmetics	1,200e	10,000	Estée Lauder	New York, NY
58	■	**Furrs**/grocery stores	1,200	9,500	Tom Friederich	Lubbock, TX
59	■	**Gateway Foods**/food wholesaling	1,200	3,000	DB Reinhart	La Crosse, WI
60	49	**JR Simplot**/frozen, dry & dehy foods, fertilizer	1,200	10,000	Dale Dunn	Boise, ID
61	54	**Arthur Young**/accounting	1,200	26,640	William L Gladstone	New York, NY
62	95	**Gilbane Building**/commercial construction	1,191	1,311	Paul J Choquette	Providence, RI
63	53	**Sammons Enterprises**/ins, cable TV, wholesale ind supply	1,190e	5,500	James Keay	Dallas, TX
64	78	**Ernst & Whinney**/accounting	1,185	12,000	Ray J Groves	Cleveland, OH
65	65	•**Weirton Steel**/steel	1,156	8,131	Robert L Loughhead	Weirton, WV

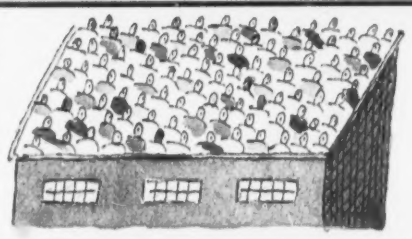
Avis is trying harder, now that it has LBO debt to shoulder.

66	45	•**Avondale Industries**/shipbldg, indus prods, RR freight cars	1,150	10,000	William F Connell	Boston, MA
67	58	**Connell Rice & Sugar**/food wholesaling	1,100e	200	Grover Connell	Westfield, NJ
68	■	**Frank Consol Enterprises**/auto dealerships, travel agency	1,100[3]	2,000	James Frank	Des Plaines, IL
69	63	**Meijer**/department stores	1,100e	16,000	Fred Meijer	Grand Rapids, MI
70	182	**Deloitte Haskins & Sells**/accounting	1,059	25,000	J Michael Cook	New York, NY
71	155	**Anschutz**/oil and gas production	1,050e	3,250	Philip F Anschutz	Denver, CO
72	■	**Chilewich Sons**/commodity trading	1,000	850	Simon Chilewich	New York, NY
73	■	**Cumberland Farms**/convenience strs, petroleum distrib	1,000	8,500	Demetrios B Haseotes	Canton, MA
74	60	**Dunavant Enterprises**/cotton trading	1,000	1,000	William B Dunavant	Memphis, TN
75	■	**Finevest Services**/diversified holding company	1,000	10,000	William Berkley	Greenwich, CT
76	61	**Helmsley-Spear**/real estate	1,000	13,000	Harry B Helmsley	New York, NY
77	■	**LeFrak Organization**/real estate devel and mgt	1,000e	2,000	Samuel J LeFrak	Forest Hills, NY
78	64	**Trammell Crow**/real estate development & management	1,000e	2,000	J McDonald Williams	Dallas, TX
79	■	**Trump Organization**/real estate development & management	1,000e	14,000	Donald J Trump	New York, NY
80	■	**Union Holdings**/natural gas and food processing	1,000e	2,700	Anthony L Geller	Independence, KS

■ Not on last year's list •Went private via leveraged buyout within last six years. e: estimate. [3] Includes IVI Travel, acquired April 1986.

The Largest Private Companies in the U.S.

Rank this year	Rank last year	Company/business	Sales (millions)	Employees	Chief executive	City, state
81	■	**Valleydale Packers**/meatpacking	$1,000e	2,608	Jack L Wagner	Bristol, VA
82	67	**Sweet Life Foods**/food wholesaling	975	1,800	Julian Leabitt	Suffield, CT
83	203	**Touche Ross & Co**/accounting	973	26,000	Edward Kangas	New York, NY
84	100	**Vantage Cos**/commercial construction	958	8,000	John Eulich	Dallas, TX
85	■	•**US Plywood**/lumber	950	2,000	Richard W Lowry	Wilton, CT
86	168	**Tauber Oil**/petroleum wholesaling	924	47	OJ Tauber Jr	Houston, TX
87	■	•**Avis**/auto rental	916	10,500	JP Barrett	Garden City, NY
88	97	**Ingram Inds**/csmr prods, software, texts, coal, water trans	900	2,300	Bronson Ingram	Nashville, TN
89	161	**Hunt Corp**/commercial and industrial construction	852	256	Robert C Hunt	Indianapolis, IN
90	■	**Scripps-Howard**/publishing, broadcasting	850	10,000	Lawrence A Leser	Cincinnati, OH



Some of the largest private companies are employee-owned: UPS, Science Applications, Weirton Steel, Dan River, Raymond International, American Cast Iron Pipe, Journal, Nibco.

91	■	•**First Brands**/consumer products	848	4,000	Alfred E Dudley	Danbury, CT
92	94	**Demoulas Super Markets**/grocery stores	845	6,500	TA Demoulas	Tewksbury, MA
93	101	**Perdue Farms**/poultry processing and mktg	840	12,000	Franklin P Perdue	Salisbury, MD
94	103	**Potamkin Cadillac**/auto dealerships	822	2,900	Victor Potamkin	New York, NY
95	166	**Schreiber Foods**/food processing	820	3,300	Robert G Bush	Green Bay, WI
96	47	**Amway**/household products	800e	7,000	Rich DeVos	Ada, MI
97	156	•**Atlantic Refining & Marketing**/oil refining & marketing	800	1,000	John Deuss	Philadelphia, PA
98	93	**Delaware North**/food svc, metals, appliance distrib	800	25,000	JM Jacobs	Buffalo, NY
99	80	**Esprit de Corp**/apparel	800	3,703	Doug Tompkins	San Francisco, CA
100	■	**McCarthy**/commercial construction	800	1,500	Michael M McCarthy	St Louis, MO
101	81	**Raley's**/grocery stores	800	5,000	Thomas Raley	Sacramento, CA
102	■	•**Red Owl Holdings**/food wholesaling	800	3,000	C Patrick Schulke	Hopkins, MN
103	124	**Wegmans Food Markets**/grocery stores	800	4,000	Robert B Wegman	Rochester, NY
104	83	**Wyatt**/petroleum wholesaling	800	90	Dudley F Blanchard	New Haven, CT
105	121	**Smith Barney, Harris Upham & Co**/inv banking & brokerage	790e	5,900	John A Orb	New York, NY
106	102	**Amerco/U-Haul** vehicle rental	783	12,500	Leonard S Shoen	Las Vegas, NV
107	■	•**Cole National**/specialty retailing	781	11,500	Jeffrey A Cole	Linhurst, OH
108	■	**First Texas Financial of Delaware**/savings & loan	777	2,300	J Livingston Kosberg	Dallas, TX
109	75	•**Parsons Corp**/engineering and construction	773	8,000	William E Leonhard	Pasadena, CA
110	108	**Golden State Foods**/meat, supplies for McDonald's	770e	1,300	James E Williams	Pasadena, CA
111	115	**Gates**/auto parts	768[4]	12,000	Charles C Gates	Denver, CO
112	150	**McDevitt & Street**/construction	765	2,495	ER Street	Charlotte, NC
113	120	**E&J Gallo Winery**/wine	750e	2,700	Ernest Gallo	Modesto, CA
114	96	**Horsehead Industries**/zinc, carbon & graphite prods	750	3,000	William E Flaherty	New York, NY
115	66	**Schnuck Markets**/grocery stores	750e	2,530	Craig Schnuck	Bridgeton, MI
116	86	**Simpson Timber**/timber, paper and plastics	750e	6,000	William G Reed Jr	Seattle, WA
117	82	**Transammonia**/trading fertilizer & petrol prods	750	175	Ronald P Stanton	New York, NY
118	127	**Gulf States Toyota**/auto importing	738e	600	Jerry Pyle	Houston, TX
119	■	•**Midland-Ross**/aerospace, electronics, ind equip	734	9,900	Richard W Viser	Cleveland, OH
120	40	**A Johnson & Co**/oil trading, telecommun equip	733	1,508	John W Priesing	New York, NY

■ Not on last year's list. •Went private via leveraged buyout within last six years. e: estimate. [4] Does not include Gates Learjet holdings, which were sold in September 1986.

The Largest Private Companies in the U.S.

Rank this year	Rank last year	Company/business	Sales (millions)	Employees	Chief executive	City, state
121	377	**Barton-Malow**/commercial and ind construction	$730	450	Benjamin Maibach Jr	Detroit, MI
122	104	**NES**/precision instruments	730	1,550	Robert A Martin	Carpentersville, IL
123	109	**Golub**/grocery stores	725	8,300	Lewis Golub	Schenectady, NY
124	■	**Thrifty Oil**/petroleum refining	725e	1,450	Ted Orden	Downey, CA
125	71	**E-Z Serve**/retailing, wholesaling petroleum products	722	425	Ray McGlothlin Jr	Abilene, TX
126	91	•**Allegheny Ludlum**/specialty steel	716	5,400	Richard P Simmons	Pittsburgh, PA
127	■	**Clark Construction Group**/general contracting	716	2,500	A James Clark	Bethesda, MD
128	■	•**Amsted Industries**/RR equip, building materials	701	8,800	Robert H Wellington	Chicago, IL
129	111	•**Cone Mills**/textiles	700	9,950	Dewey L Trogdon	Greensboro, NC
130	■	**Gillett Group**/meatpacking, broadcasting, resorts	700e	4,800	George N Gillett Jr	Nashville, TN
131	■	**Lennox International**/climate-control equip	700e	6,000	John W Norris Jr	Dallas, TX
132	■	**Scoular**/grain storing & merchandising, agric chems	700	450	Marshall E Faith	Omaha, NE
133	■	**Western Auto**/auto parts stores	697	4,200	John T Lundegard	Kansas City, MO
134	■	**Stephens**/investment banking and brokerage	695e	280	Warren A Stephens	Little Rock, AR
135	■	•**PIE*Nationwide**/trucking	680	11,000	Morton Huff	Jacksonville, FL
136	■	•**Seven-Up**[5]/soft drinks	678	560	Edward W Frautel	St Louis, MO
137	114	**Warren Equities**/oil & gas wholesaling & retailing, conv strs	675	1,400	Warren Alpert	New York, NY
138	131	**Rich Products**/frozen foods	660	5,000	Robert E Rich Jr	Buffalo, NY
139	■	**Randall's Food Markets**/grocery stores	650	2,800	Robert R Onstead Sr	Houston, TX
140	■	**Worldwide Volkswagen**/distr VW & Audi autos & parts	650	400	Arthur Stanton	Orangeburg, NY

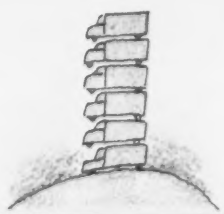
There are no publicly traded auto dealerships. One private one, Potamkin, does $822 million in sales.

141	145	**Price Waterhouse**/accounting	645	29,000	Joseph E Connor	New York, NY
142	116	**Alfred M Lewis**/food distributing, grocery stores	643	900	Michael C Burandt	Riverside, CA
143	119	**Drummond**/coal	635	3,350	Garry N Drummond	Jasper, AL
144	107	**Dubuque Packing**/meatpacking	633	1,450	Charles E Stoltz	Omaha, NE
145	132	**Rock Island Refining**/petroleum products	625e	300	John Hofer	Indianapolis, IN
146	■	**Amcena**/department stores	620e	8,300	Ronald Brenninkmeyer	New York, NY
147	■	•**Ticor Insurance**/title insurance	618	7,116	Winston V Morrow	Los Angeles, CA
148	■	**Eighty Four Lumber**/retailing building materials	608	3,300	Joseph A Hardy Sr	Eighty Four, PA
149	125	•**Arcata**/printing and forest prods	600	7,000	Edward L Scarff	San Francisco, CA
150	■	**Associated Metals & Minerals**/metal trading	600	210	Stefan E Eliel	White Plains, NY
151	92	**Crowley Maritime**/marine transportation	600	4,500	Thomas B Crowley	San Francisco, CA
152	■	•**Edgcomb**/steel service center	600	2,000	Michael Scharf	New York, NY
153	146	**Hartz Mountain**/pet food, real estate, publishing	600e	3,000	Leonard Stern	Harrison, NJ
154	128	**Metallurg**/metals mining	600	4,000	Michael A Standen	New York, NY
155	220	**Steuart Investment**/petroleum storing and marketing	600	800	Curtis S Steuart	Washington, DC
156	■	**Triad America**/oil refining & wholesaling, real estate	600e	450	Donald W Fraser	Salt Lake City, UT
157	77	**Triangle Publications**/magazines, newspapers	600	2,500	Walter H Annenberg	Radnor, PA
158	■	•**SCI Holdings**[6]/broadcasting	592	4,800	Terry Lee	Miami, FL
159	■	•**Warnaco**/apparel	591	11,000	Linda J Wachner	Bridgeport, CT
160	■	**Holman Enterprises**/auto dealerships	583	1,872	Joseph S Holman	Pennsauken, NJ

■ Not on last year's list. •Went private via leveraged buyout within last six years. e: estimate. [5] Will be private pending sale by Philip Morris.
[6] Formerly Storer Broadcasting.

The Largest Private Companies in the U.S.

Rank this year	Rank last year	Company/business	Sales (millions)	Employees	Chief executive	City, state
161	216	**Mellon Stuart Holding**/gnrl contracting, construction mgmt	$579	1,450	David F Figgins	Pittsburgh, PA
162	217	**Lykes Brothers**[7]/food processing	575e	2,000	Charles P Lykes	Tampa, FL
163	■	•**Oppenheimer & Co**/investment banking and brokerage	575	22,000	Stephen Robert	New York, NY
164	148	**Piggly Wiggly Southern**/grocery stores	570	5,700	Ronald R Frost	Vidalia, GA
165	105	**Andersons**/agribusiness, consumer products	567	1,170	Richard P Anderson	Maumee, OH
166	■	•**Foodmaker**/Jack in the Box restaurants	564	27,000	Jack W Goodall	San Diego, CA
167	152	**Maritz**/motivation progs, bus meetings, mkt research	563	3,200	William E Maritz	Fenton, MO
168	153	**United Van Lines**/moving services	562	800	Rober J Baer	Fenton, MO
169	171	**Builder Marts of America**/wholesaling building materials	555	675	Clarence B Bauknight	Greenville, SC
170	■	**MagneTek**/electronic equipment	555[8]	6,000	Frank Perna Jr	Los Angeles, CA
171	98	•**MacAndrews & Forbes Holdings**/tobacco, movie, film process	552	3,000	Ronald O Perelman	New York, NY
172	69	**Renfield**/liquor and wine importing	552	200	Herman Mernhoff	New York, NY
173	■	•**First American Bankshares**/bank holding	551	4,246	Robert G Stevens	Washington, DC
174	174	•**Harte-Hanks Communications**/broadcasting, publishing	551	11,500	Bob Marbut	San Antonio, TX
175	191	•**Boy's Market**/grocery stores	550	4,000	Peter Supini	Highland Park, CA
176	158	•**Coca-Cola Bottling Co of NY**/soft drink bottling and distrib	550	3,200	Edward F O'Reilly	Greenwich, CT
177	136	**Duchossois Enterprises**/railroad equipment	550e	6,000	Richard L Duchossois	Elmhurst, IL
178	143	•**Guardian Inds**/flat glass	550	5,500	William Davidson	Northville, MI
179	138	**Southwire**/metal fabricating	550	3,500	James C Richards[9]	Carrollton, GA
180	185	**Allied Van Lines**/moving services	547	890	Dennis I Mudd	Chicago, IL
181	142	**Andersen Corp**/building materials	545	2,900	WA Wellman	Bayport, MN
182	■	**Domino's Pizza**/pizza restaurants	539	5,000	Tom S Monaghan	Ann Arbor, MI
183	■	•**Republic Health**/hospitals	539	8,730	James E Buncher	Dallas, TX
184	179	**Young & Rubicam**/advertising	536	10,000	Alexander Kroll	New York, NY
185	386	**Koll**/construction, real estate	535	700	John Koll	Newport Beach, CA
186	214	**Science Applications International**/research and development	533	6,500	Dr JR Beyster	La Jolla, CA
187	■	**Paragon Group**/real estate develop and mgmt	530	1,300	WR Cooper	Dallas, TX
188	■	•**Sybron**/health care equipment	530	7,150	Kenneth F Yontz	Saddle Brook, NJ
189	210	**HCB Contractors**/general construction mgmt	529	1,500	Lawrence A Wilson	Dallas, TX
190	181	**Ingles Markets**/grocery stores, milk processing	528	4,800	Robert P Ingle	Asheville, NC



U-Haul, owned by Nevada-based Amerco, has the nation's biggest fleet of rental trucks.

191	187	**Cardinal Industries**/manufactured housing	527	7,071	Austin Guirlinger	Columbus, OH
192	381	**Irvine Co**/real estate devel and mgmt	525e	1,200	Donald Bren	Newport Beach, CA
193	208	**HB Zachry**/commercial, ind & highway construct	525	8,000	H Bartel Zachry	San Antonio, TX
194	■	**Johnson & Higgins**/ins brkrs, personnel consultants	523	6,710	Robert V Hatcher Jr	New York, NY
195	140	•**Vista Chemical**/chemicals	521	1,500	John D Burns	Houston, TX
196	■	**Snyder General**/climate-control equip	520	4,500	Richard W Snyder	Dallas, TX
197	233	**Racetrac Petroleum**/convenience stores, gasoline	517	1,650	Carl Bolch Jr	Atlanta, GA
198	74	•**Raymond Intl**/engineering and construction	517e	2,400	Henry LeMieux	Houston, TX
199	151	**JM Huber**/energy, rubber, natural resources	516	3,000	Michael W Huber	Edison, NJ
200	110	**AG Spanos Cos**/apt construction and management	515	925	Alex Spanos	Stockton, CA

■ Not on last year's list. •Went private via leveraged buyout within last six years. e: estimate. [7] Sold Lykes Steamship. Lykes Brothers Steamship ranks 363. [8] Includes Universal Mfg and Century Electric. Both acquired 1986. [9] Office of chief executive shared by three individuals.

The Largest Private Companies in the U.S.

Rank this year	Rank last year	Company/business	Sales (millions)	Employees	Chief executive	City, state
201	292	**B Green & Co**/food distributing, grocery stores	$510	1,600	Bernard Green	Baltimore, MD
202	199	**Kohler**/plumbing equip, engines & generators	510e	8,000	Herbert V Kohler Jr	Kohler, WI
203	■	**Taubman Investment**/department stores, restaurants	510e	7,570	Alfred Taubman	Bloomfield Hills, MI
204	176	**Battelle Memorial Institute**/research and development	500	7,487	Dr Ronald S Paul	Columbus, OH
205	180	**Brookshire Grocery**/grocery stores	500	2,200	Bruce G Brookshire	Tyler, TX
206	■	**Edward J DeBartolo**/real estate devel and mgmt	500e	11,000	Edward J DeBartolo	Youngstown, OH
207	159	**Grocers Supply Co**/food wholesaling	500e	1,000	Robert Ozmun	Houston, TX
208	211	•**Hyster**/forklift trucks and tractors	500e	5,000	William H Kilkenny	Portland, OR
209	165	**North Pacific Lumber**/forest products	500	360	Leo T Gibbons	Portland, OR
210	192	**Oklahoma Publishing**/publishing, broadcasting	500	4,000	Edward L Gaylord	Oklahoma City, OK
211	198	•**Pamida**/department stores	500	4,500	C Clayton Burkstrand	Omaha, NE
212	207	**Phelps**/commercial construction	500	3,000	Robert G Tointon	Greeley, CO
213	167	**Schwan's Sales Enterprise**/frozen foods	500	5,000	Marvin Schwan	Marshall, MN
214	173	**Superior's Brand Meats**/meatpacking	500	2,500	Neil Genshaft	Massillon, OH
215	230	**WWF Paper**/stationery & writing paper	500	800	Edward V Furlong Jr	Bala Cynwyd, PA

The 400 biggest private companies have sales of $390 billion. The 400 largest public ones, $2.5 trillion.

216	■	**Inland Real Estate**/real estate	495	1,600	Daniel L Goodwin	Oak Brook, IL
217	251	•**Early & Daniel Industries**/food processing	493	225	Samuel M Harrell	Cincinnati, OH
218	■	•**Kane-Miller**/meatpacking	490	1,100	Stanley B Kane	Tarrytown, NY
219	■	**Brenlin Group**/metal fabricating	479	3,600	David Brennan	Akron, OH
220	■	**GSC Enterprises**/food wholesaling	475	900	Michael K McKenzie	Sulphur Springs, TX
221	■	**Westfield Cos**/insurance	475e	1,500	Dale W Smucker	Westfield Center, OH
222	290	**Fidelity Investments**/fund management	470	4,000	Edward C Johnson III	Boston, MA
223	164	•**Marley**/heat transfer equip	470	5,200	Robert J Dineen	Shawnee Mission, KS
224	188	**Nash Phillips/Copus**/home building, land devel, real estate	461	1,080	Clyde Copus	Austin, TX
225	202	**Schwegmann Giant Supermarkets**/grocery stores	460	4,800	John F Schwegmann	New Orleans, LA
226	201	**Swinerton & Walberg**/general contracting	455	1,500	Milo S Gates	San Francisco, CA
227	260	**Youngs Market**/food and liquor wholesaling	451	950	Vernon Underwood Sr	Los Angeles, CA
228	117	**Bartlett Agri Enterprises**/grain, flour, cattle feed	450	575	Paul D Bartlett Jr	Kansas City, MO
229	■	**Bigheart Pipe Line**/petroleum wholesaling	450e	280	Henry Zarrow	Tulsa, OK
230	249	**Chemcentral**/chemical distributing	450	750	HS Wenstrup	Chicago, IL
231	205	**SJ Groves & Sons**/heavy construction	450	5,000	OE Powers	Minneapolis, MN
232	237	**Merchants Distributors**/food wholesaling	450e	985	Boyd George	Hickory, NC
233	193	**Pilgrim Pride**/poultry processing and mktg, feed	450	4,500	Lonnie Pilgrim	Pittsburg, TX
234	■	**Pride Refining**/oil refining and transportation	450	200	James R Morris	Abilene, TX
235	194	**Roseburg Forest Products**/forest products	450	4,000	Kenneth W Ford	Roseburg, OR
236	178	•**UIS**/auto parts	450	6,500	Harold Lebensfeld	New York, NY
237	196	**Walbridge, Aldinger**/commercial contracting	450	1,120	John Rakolta Jr	Livonia, MI
238	197	**Wilbur-Ellis**/distributing farm supplies	450	1,500	CP Thacher	San Francisco, CA
239	379	**Flying J**/integrated petroleum	440	2,000	OJ Call	Brigham City, UT
240	■	**Providence Journal**/newspapers	434	3,500	Michael P Metcalf	Providence, RI

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The Largest Private Companies in the U.S.

Rank this year	Rank last year	Company/business	Sales (millions)	Employees	Chief executive	City, state
241	204	**CR Anthony**/department stores	$427	8,000	Robert H Anthony	Oklahoma City, OK
242	■	•**Schottenstein**/department and furniture stores	425e	4,500	Jerome Schottenstein	Columbus, OH
243	228	**Wheaton Inds**/packaging	425e	10,000	Frank H Wheaton	Millville, NJ
244	■	•**Palm Beach**/apparel	419	6,500	Elmer L Ward Jr	Cincinnati, OH
245	■	**Country Companies Group**/insurance	416	2,153	Duane L Miller	Bloomington, IL
246	232	•**AJ Bayless Markets**/grocery stores	410e	3,000	Bruce Krysiak	Phoenix, AZ
247	■	•**Blaw Knox**/industrial equip, engineering	410e	2,500	WD Hunt	Pittsburgh, PA
248	255	**Rosenthal Cos**/auto dealerships	404	1,200	Robert M Rosenthal	Arlington, VA
249	213	**Austin Industries**/heavy construction	400	5,500	William T Solomon	Dallas, TX
250	■	•**Bath Iron Works**[10]/ship bldg and repairing	400	7,500	William E Haggett	Bath, ME
251	122	•**Dan River**/textiles	400	7,000	David W Johnston	Danville, VA
252	■	•**Friona**/meatpacking	400	900	Denis Farley	Dallas, TX
253	160	**Houdaille Industries**/industrial products	400	5,000	Phillip A O'Reilly	Ft Lauderdale, FL
254	■	**McLouth Steel Products**/steel	400	2,300	Milton Deaner	Trenton, MI
255	240	**Microdot**/connecting devices, ingot molds	400e	4,100	Richard P Strubel	Chicago, IL
256	254	**Minyard Food Stores**/grocery stores	400	4,000	MT Minyard	Coppell, TX
257	130	**Parsons & Whittemore**/ind machinery, pulp	400e	2,500	Carl C Landegger	New York, NY
258	■	**Penske**/auto dealerships, racing, parts	400e[11]	1,000	Roger S Penske	Reading, PA
259	195	**Trailways**/bus transport, bus mfg	400	3,500	James L Kerrigan	Dallas, TX
260	229	**World Carpets**/carpets	400	2,000	Shaheen Shaheen	Dalton, GA
261	■	**Southern Farm Bureau Casualty Ins Co**/insurance	396	1,200	John W Head	Jackson, MS
262	183	**CL Peck Contractor**/general construction	386	350	Louis M Stafford	Los Angeles, CA
263	236	**Central Newspapers**/newspapers	384e	5,000	Frank Russell	Indianapolis, IN
264	242	**Asplundh Tree Expert**/tree-trimming for elec utilities	383e	11,330	Edward K Asplundh	Willow Grove, PA
265	268	**Club Corp of America**/sports clubs	380	13,000	Robert H Dedman	Dallas, TX
266	252	**Home Interiors & Gifts**/home furnishings	380	1,400	Donald J Carter	Dallas, TX
267	300	**McWane**/pipe mfg and water treatment	380e	3,675	John McMahon	Birmingham, AL
268	247	**Almac's**/grocery stores	379	774	AW Pike	East Providence, RI
269	■	**Alberici**/commercial construction	375	1,000	Gabriel J Alberici	St Louis, MO
270	271	**C&S Wholesale Grocery**/food wholesaling	375	420	Lester Cohen	Brattleboro, VT

Franchiser Domino's Pizza has sales of but $539 million, although its outlets do more than $1 billion in food.

271	293	**Greenwood Mills**/textiles	375e	6,800	JC Self Jr	Greenwood, SC
272	253	**Hyplains Dressed Beef**/meatpacking	375	275	James Mitchel	Dodge City, KS
273	163	**Ben E Keith**/food and beverage distributing	375e	1,351	Howard Hallam	Fort Worth, TX
274	256	**Sprague Resources**/residential and commercial contracting	375	3,000	Robert M Helsell	Seattle, WA
275	■	**Quicktrip**/convenience stores	370	1,400	Chester Cadieux	Tulsa, OK
276	70	•**ACF Industries**/mfg, leasing RR equip	367	1,500	Carl C Icahn	Earth City, MO
277	272	**Colonial Oil Industries**/wholesaling, retailing petrol prods	367	187	Robert H Demere	Savannah, GA
278	243	**Fred W Albrecht Grocery**/grocery and drugstores	360	3,000	F Steven Albrecht	Akron, OH
279	313	•**American Seaway Foods**/food distributing	360	700	Ralph Garson	Bedford Heights, OH
280	246	**Hughes Markets**/grocery stores	358	5,590	Fred B McLaren	Los Angeles, CA

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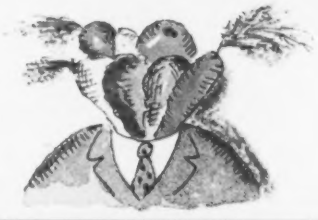
[11] Excludes 50%-owned Hertz-Penske.

The Largest Private Companies in the U.S.

Rank this year	Rank last year	Company/business	Sales (millions)	Employees	Chief executive	City, state
281	275	**MA Mortenson**/commercial contractors	$358	850	MA Mortenson Jr	Minneapolis, MN
282	227	**Vanguard Energy**/petroleum products	357	28	C Phillip Trotter	Houston, TX
283	■	**Martin Exploration Management**/petroleum, conv stores	352	684	Carl C Greer	Blue Island, IL
284	■	**Moyer Packing**/meatpacking	351	1,200	Curtis F Moyer	Souderton, PA
285	■	•**Carnival Cruiseline**/vacation cruises	350	3,500	Ted Arison	Miami, FL
286	291	•**Granite Construction**/commercial construction	350	2,500	Richard C Solari	Watsonville, CA
287	■	•**Health-tex**/children's apparel	350	9,000	Robert A Breakstone	New York, NY
288	73	**Hillman Co**/refrig equip, coal, metal fab, real estate	350e[12]	8,700	Henry Hillman	Pittsburgh, PA
289	■	•**J&L Specialty Products**/flat-rolled stainless steel	350	1,100	Claude F Kronk	Pittsburgh, PA
290	■	**JRH**/auto dealerships	350	1,000	JR Hendrick III	Charlotte, NC
291	■	**McKinsey & Co**/consulting	350e	1,046	D Ronald Daniel	New York, NY
292	■	**Media News Group**/newspapers	350e	14,000	William D Singleton	Dallas, TX
293	■	**Northville Industries**/gasoline wholesaling & retailing	350	250	Harold Bernstein	Melville, NY
294	263	**Pantry**/convenience stores	350	3,200	Samuel J Wornom III	Sanford, NC
295	315	**Roger Williams Food**/food distributing	350	500	Scott B Laurans	Providence, RI



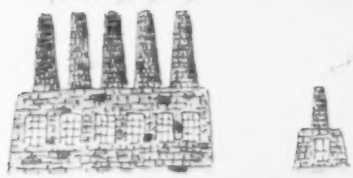
58 of the 400 companies here wholesale or retail food.

296	■	**United Coal**/coal mining	350	1,000	James W McGlothlin	Bristol, VA
297	170	**USA Petroleum**/gasoline retailing	350	400	John J Moller	Santa Monica, CA
298	■	**Jervis B Webb**/material handling equipment	350	2,900	Jervis C Webb	Farmington Hills, MI
299	266	**K&B**/drugstores	347e	3,100	Sydney J Besthoff III	New Orleans, LA
300	280	**Encyclopaedia Britannica**/publishing	345	1,042	Robert Gwinn	Chicago, IL
301	149	•**Columbian Enterprises**/chemicals, metal trading	341	1,251	L von Hoffmann	New York, NY
302	221	**Ferrell Cos**/oil	340e	450	James E Ferrell	Liberty, MO
303	276	**3 Beall Brothers 3**/department stores	340	2,800	Royce Beall	Jacksonville, TX
304	■	**Walton Monroe**/textiles	340	4,700	G Stephen Felker	Monroe, GA
305	261	**Journal**/newspapers	339	3,650	Thomas J McCollow	Milwaukee, WI
306	238	•**GNB**/batteries	337	3,000	Stanley N Gaines	Mendota, MN
307	321	•**Formica**/building materials	335	3,600	Gordon D Sterling	Wayne, NJ
308	351	**Hale-Halsell**/grocery stores	335	450	Bob Hawk	Tulsa, OK
309	■	**Harbour Group**/machine tools	335e	3,000	Sam Fox	Clayton, MO
310	239	**HBE**/commercial construction	335e	4,100	Fred F Kummer	St Louis, MO
311	■	•**Budget Rent a Car**/auto rental	332	3,500	Clif Haley	Chicago, IL
312	113	**D'Arcy, Masius, Benton & Bowles**/advertising	330	6,100	John S Bower	New York, NY
313	307	**Taubman Co**/real estate devel and mgmt	330e	400	A Alfred Taubman	Bloomfield Hills, MI
314	■	**Towers, Perrin, Foster & Crosby**/consulting & reinsurance	330	3,300	Quentin I Smith Jr	New York, NY
315	259	**Tang Industries**/metal fabricating & distributing	327e	4,000	Cyrus Tang	Elk Grove Village, IL
316	189	**Aarque Cos**/metal fabricating	325	3,100	R Quintus Anderson	Jamestown, NY
317	■	**Booz, Allen & Hamilton**/consulting	325	2,800	RM McCullough	New York, NY
318	337	**Fareway Stores**/grocery stores	325	800	FW Beckwith	Boone, IA
319	269	**Freedom Newspapers**/publishing, broadcasting	325	4,500	DR Segel	Irvine, CA
320	■	•**Kuscan**/vinyl siding, fiberglass, toys, plastics	325	3,200	Reynold Nebel	Brentwood, TN

■ Not on last year's list. •Went private via leveraged buyout within last six years. e: estimate. [12] Excludes Pameco and Copeland, which were sold in 1986.

The Largest Private Companies in the U.S.

Rank this year	Rank last year	Company/business	Sales (millions)	Employees	Chief executive	City, state
321	■	**Marketing Corp of America**/mktg services, venture capital	$325	1,800	James R McManus	Westport, CT
322	■	**Benjamin Moore & Co**/paint and varnish	325e	1,200	M Workmen	Montvale, NJ
323	225	**RB Pamplin Corp**/textiles, concrete, asphalt	325	6,600	RB Pamplin	Portland, OR
324	304	**Randall Stores**/grocery stores	325	2,700	Ron Randall	Mitchell, SD
325	■	**Rugby Labs**/generic drugs	325e	2,000	Michael Ashkin	Rockville Center, NY
326	■	**Sundt**/residential and commercial construction	322	2,000	H Wilson Sundt	Tucson, AZ
327	248	**Bourns**/precision instruments	320	6,000	Albert R Snider	Riverside, CA
328	■	**Coulter Electronics**/precision instruments	320e	4,000	Wallace H Coulter	Hialeah, FL
329	■	**PMC**/specialty chemicals	320	2,100	Philip Kamins	Sun Valley, CA
330	305	**Ris Paper**/paper distributing	320	575	Thomas Malden	Garden City, NY



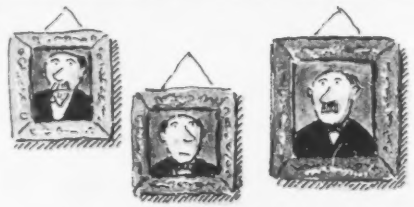
About 10,000 companies are public. About 7 million aren't.

331	■	**Tuscan Industries**/dairy products	320e	900	Louis S Caiola	Union, NJ
332	■	**Weil Bros Cotton**/cotton wholesaling	320e	100	James McGhee	Montgomery, AL
333	270	**Rinker Materials**/concrete	318	2,300	Marshall E Rinker Sr	West Palm Beach, FL
334	■	**Investors Management**/Golden Coral and other restaurants	317	14,000	James H Maynard	Raleigh, NC
335	283	**Avtex Fibers**/synthetic fibers for auto and textile inds	315e	3,000	John N Gregg	Valley Forge, PA
336	274	**ER Carpenter**/plastic foams	315	4,500	Stanley F Pauley	Richmond, VA
337	297	**Krasdale Foods**/food distributing	315	525	Charles A Krasne	Bronx, NY
338	338	**McClatchy Newspapers**/newspapers, broadcasting	315	3,500	Charles K McClatchy	Sacramento, CA
339	206	**Moorman Mfg**/livestock and poultry feeds	315e	4,000	RA Liebig	Quincy, IL
340	■	**Brown Brothers Harriman**/commercial and invest banking	310e	1,300	Terrence M Farley	New York, NY
341	231	**Summa**/hotels and casinos	310e	6,100	William R Lumas	Las Vegas, NV
342	265	**Jerseymaid Milk Products**/dairy products	308	550	Benjamin Harrington	Los Angeles, CA
343	312	•**California Home Brands**/food processing	305e	2,800	Robert A Davies III	Terminal Island, CA
344	250	**Copley Newspapers**/newspapers	305	3,400	Helen K Copley	La Jolla, CA
345	339	**LL Bean**/outdoor sporting goods retailing	304	1,775	Leon A Gorman	Freeport, ME
346	317	**Dillard Paper**/wholesaling of paper and plastic prods	301	1,400	John H Dillard	Greensboro, NC
347	234	•**Albany Intl**/equip for papermaking machinery	300	5,000	Frank L McKone	Albany, NY
348	281	**American Cast Iron Pipe**/steel pipe, valves	300	2,600	Paul Green	Birmingham, AL
349	■	**BE&K**/industrial engineering and construction	300	685	TC Kennedy	Birmingham, AL
350	284	**Boyd Group**/hotels & casinos	300	6,500	William S Boyd	Las Vegas, NV
351	288	**Day & Zimmermann**/engineering, consulting	300	10,000	Harold L Yoh Jr	Philadelphia, PA
352	273	**Fiesta Mart**/grocery stores	300	2,500	Donald L Bonham	Houston, TX
353	■	**General Automotive**/bus manufacturing & refurbishing	300	1,525	Cruse W Moss	Ann Arbor, MI
354	349	**Gordon Food Service**/food distributing	300	875	Paul B Gordon	Grand Rapids, MI
355	352	**Haworth**/office furniture	300	2,200	GW Haworth	Holland, MI
356	295	**Roy M Huffington**/oil and gas in Indonesia	300	3,200	Roy M Huffington	Houston, TX
357	296	**ICC Industries**/chemicals	300	1,600	John Farber	New York, NY
358	380	**Inductotherm Inds**/industrial equipment	300	4,000	Henry Rowan	Rancocas, NJ
359	■	**Inserra Supermarkets**/grocery stores	300	2,000	Lawrence R Inserra	Mahwah, NJ
360	■	**Jockey International**/men's underwear	300	3,200	Donna W Steigerwaldt	Kenosha, WI

■ Not on last year's list. •Went private via leveraged buyout within last six years. e: estimate.

The Largest Private Companies in the U.S.

Rank this year	Rank last year	Company/business	Sales (millions)	Employees	Chief executive	City, state
361	298	**Lamb Technicon**/automation equip	$300	1,300	Jonathan P Rye	Warren, MI
362	■	**Landmark Communications**/publishing, broadcasting	300	4,000	Richard F Barry	Norfolk, VA
363	■	**Lykes Brothers Steamship**/ocean freight transport	300	1,000	WJ Amoss Jr	New Orleans, LA
364	■	**Philadelphia Hide Brokerage**/grain trading	300	100	Michael Halpert	Philadelphia, PA
365	303	**Pickens-Bond Construction**/commercial construction	300	1,000	G Larry Kelley	Little Rock, AR
366	306	**Stowe Mills**/yarn	300	3,800	JM Carstarphen	McAdenville, NC
367	309	**Vitt Media International**/media buying for advertisers	300	117	Roy Muro	New York, NY
368	■	•**Wilson Sporting Goods**/mfg sporting goods	300	4,500	John P Murray Jr	River Grove, IL
369	■	**Worldmark**/building materials	300	1,000	Dean Rhoads	No Palm Beach, FL
370	■	**Oliver Carr Co**/real estate devel and mgt	299	400	Oliver Carr	Washington, DC
371	368	**HC Prange**/department, discount & specialty stores	298	5,500	Henry C Prange	Sheboygan, WI
372	336	**Wawa**/convenience stores	295	1,000	Richard Wood Jr	Wawa, PA
373	393	**Continental Cablevision**/cable broadcasting	295	3,000	Amos B Hostetter Jr	Boston, MA
374	■	**Haggar**/men's and women's apparel	295e	6,500	JM Haggar Jr	Dallas, TX
375	324	•**Spalding & Evenflo**/sporting goods, baby prods	295	2,800	Donald J Byrnes	Tampa, FL
376	■	**Associated Materials**/building materials	292	2,100	William Winspear	Dallas, TX
377	302	•**Otasco**/auto parts stores	290	3,250	Jerry L Goodman	Tulsa, OK
378	345	**Exide**/batteries	290	2,400	Arthur Hawkins	Horsham, PA
379	319	**Jupiter Industries**/transportation svcs, natl gas, and const	290e	3,000	Edward Ross	Chicago, IL
380	331	•**Ti-Caro**/textiles	290	5,100	James C Fry	Gastonia, NC



64 of these 400 companies are owned by individuals or families appearing on this year's FORBES list of the 400 richest Americans.

381	■	**Automanage**/auto dealerships	290	947	Michael L Dever	Cincinnati, OH
382	328	•**Atalanta**/importing meats, cheese and other foods	289	200	George Gellert	New York, NY
383	■	**Guilford Transportation**/railroad and trucking	289	2,500	David Fink	North Billerica, MA
384	■	**Western Petroleum**/petroleum wholesaling	289	30	James W Eminson	Minneapolis, MN
385	■	•**Joyce International**/office furniture and supplies	286	4,000	David Gardner	Great Neck, NY
386	■	**Donrey Media Group**/publishing, broadcasting	285	4,200	Donald W Reynolds	Fort Smith, AR
387	■	**Humiston-Keeling**/drug distributing	285	246	Burton H Olin	Chicago, IL
388	326	**Consumers Markets**/grocery stores	284	2,000	Clarence Wheeler	Springfield, MO
389	■	**Morris Communications**/newspapers, computer svcs	284	3,050	William S Morris III	Augusta, GA
390	323	**Rodgers Co**/general contracting	284	1,200	James P Bennett	Nashville, TN
391	320	•**American Sterilizer**/health care equipment	280	3,800	HE Fish	Erie, PA
392	■	**Bright Banks Savings Assoc**/savings & loan	280	3,000	James B Reeder	Dallas, TX
393	334	**Calvin Klein**/apparel	280e	5,500	Joel Newman	New York, NY
394	370	**James Ferrera & Sons**/grocery stores	280	900	Harold H Ferrera	Canton, MA
395	■	**Fletcher Oil & Refining**/petroleum refining	280	145	Bob Fletcher	Wilmington, CA
396	■	•**Glosser Brothers**/discount stores, grocery stores	280	3,200	Alvin M Glosser	Johnstown, PA
397	316	**Dayton-Walther**/auto parts, building materials	279	2,915	Daniel Walther	Dayton, OH
398	262	•**American Brass**/copper	278	2,000	J Goodell	Buffalo, NY
399	■	**Bob Frink Management**/auto dealerships	276	500	Bob Frink	Sacramento, CA
400	384	**Menasha**/packaging, plastics, paper products	276	2,300	DC Sheppard	Neenah, WI

■Not on last year's list. •Went private via leveraged buyout within last six years. e: estimate.

The Largest Private Companies in the U.S.

This alphabetical listing shows the relative sales ranking of the 400 largest private companies in the U.S. The numerical ranking begins on page 193. For an explanation of rules, definitions and sources, see box on page 192.

Company	Rank	Company	Rank	Company	Rank
Aarque Cos	316	Barton-Malow	121	Colonial Oil Industries	277
ACF Industries	276	Bath Iron Works	250	Columbian Enterprises	301
Advance Publications	27	Battelle Memorial Institute	204	Cone Mills	129
Albany Intl	347	AJ Bayless Markets	246	Connell Rice & Sugar	67
Alberici	269	BE&K	349	Consumers Markets	388
Fred W Albrecht Grocery	278	LL Bean	345	Continental Cablevision	373
Allegheny Ludlum	126	Beatrice	4	Continental Grain	3
Allied Van Lines	180	Bechtel Group	8	Coopers & Lybrand	50
Almac's	268	Belk Brothers	40	Copley Newspapers	344
Amcena	146	Bigheart Pipe Line	229	Coulter Electronics	328
Amerco	106	Blaw Knox	247	Country Companies Group	245
American Brass	398	Booz, Allen & Hamilton	317	Cox Enterprises	46
American Cast Iron Pipe	348	Bourns	327	Crowley Maritime	151
American Financial	22	Boyd Group	350	Cumberland Farms	73
American Seaway Foods	279	Boy's Market	175	Dan River	251
American Sterilizer	391	Brenlin Group	219	D'Arcy, Masius, Benton & Bowles	312
Amstar Holdings	53	Bright Banks Savings Assoc	392	Day & Zimmermann	351
Amsted Industries	128	Brookshire Grocery	205	Dayton-Walther	397
Amway	96	Brown Brothers Harriman	340	Edward J DeBartolo	206
Andersen Corp	181	Budget Rent a Car	311	Delaware North	98
Arthur Andersen & Co	39	Builder Marts of America	169	Deloitte Haskins & Sells	70
Andersons	165	HE Butt Grocery	32	Demoulas Super Markets	92
Anschutz	71	C&S Wholesale Grocery	270	Denny's	51
CR Anthony	241	California Home Brands	343	Dillard Paper	346
Apex Oil	5	Calvin Klein	393	Dillingham	41
ARA Services	14	Cardinal Industries	191	Dominick's Finer Foods	37
Arcata	149	Cargill	1	Domino's Pizza	182
Asplundh Tree Expert	264	Carlson Cos	17	Donrey Media Group	386
Associated Materials	376	Carnival Cruiseline	285	Drexel Burnham Lambert	23
Associated Metals & Minerals	150	ER Carpenter	336	Louis Dreyfus	11
Atalanta	382	Oliver Carr Co	370	Drummond	143
Atlantic Refining & Marketing	97	Central Newspapers	263	Dubuque Packing	144
Austin Industries	249	Chemcentral	230	Duchossois Enterprises	177
Automanage	381	Chilewich Sons	72	Dunavant Enterprises	74
Avis	87	Clark Construction Group	127	E-Z Serve	125
Avondale Industries	66	Club Corp of America	265	Early & Daniel Industries	217
Avtex Fibers	335	Coca-Cola Bottling Co of NY	176	Jack Eckerd	21
Bartlett Agri Enterprises	228	Cole National	107	Edgcomb	152

The Largest Private Companies in the U.S.

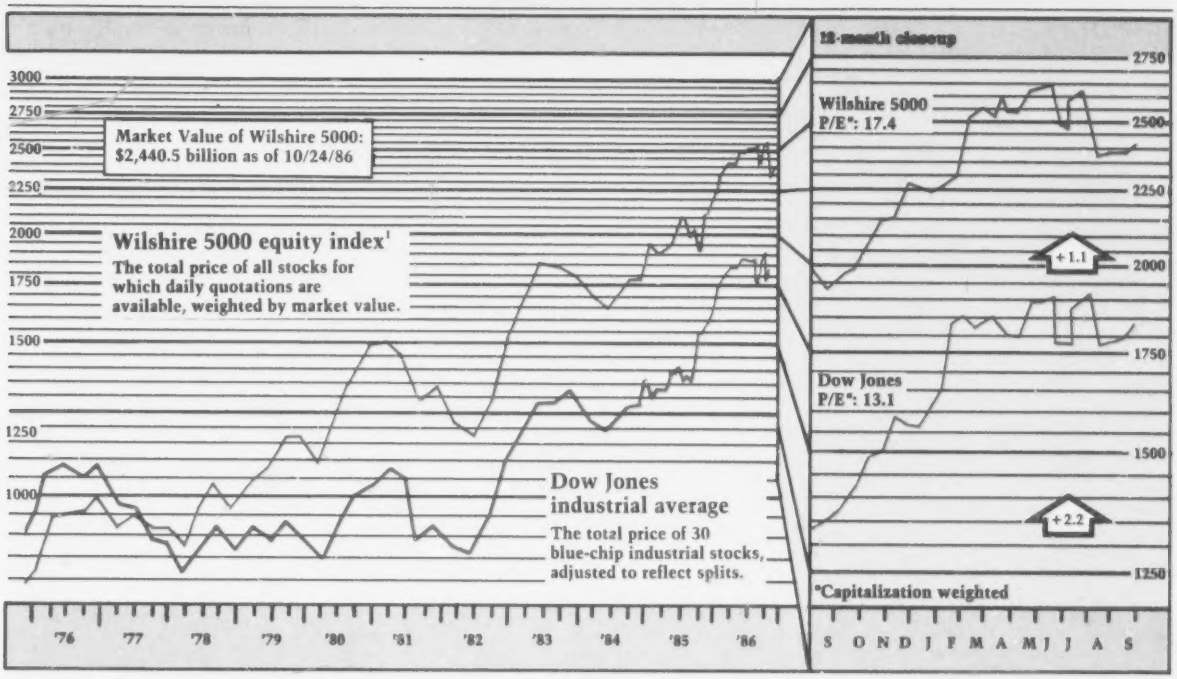
Company	Rank	Company	Rank	Company	Rank
Eighty Four Lumber	148	Guardian Inds	179	[illegible]	[illegible]
Encyclopaedia Britannica	300	Guilford Transportation	263	[illegible]	[illegible]
Ernst & Whinney	64	Gulf States Toyota	118	[illegible]	[illegible]
Esprit de Corp	99	H Group Holdings	81	[illegible]	[illegible]
Estée Lauder	57	Haggar	274	[illegible]	[illegible]
Exide	378	Hale-Halsell	308	[illegible]	[illegible]
Fareway Stores	318	Hallmark Cards	35	[illegible]	[illegible]
Farley Industries	28	Harbour Group Ltd	109	[illegible]	[illegible]
Ferrera & Sons	394	Harte-Hanks Communications	179	[illegible]	[illegible]
Ferrell Companies	302	Hartz Mountain	158	[illegible]	[illegible]
Fidelity Investments	222	Haworth	193	[illegible]	[illegible]
Fiesta Mart	352	HBE	213	[illegible]	[illegible]
Finevest Services	75	HCB Contractors	169	[illegible]	[illegible]
First American Bankshares	173	Health-tex	287	[illegible]	[illegible]
First Brands	91	Hearst Publications	63	[illegible]	[illegible]
First National Supermarkets	42	Helmsley-Spear	76	[illegible]	[illegible]
First Petroleum	84	Hillman Co	288	[illegible]	[illegible]
First Texas Financial of Delaware	100	Holman Enterprises	182	[illegible]	[illegible]
Fletcher Oil & Refining	395	Home Interiors & Gifts	266	[illegible]	[illegible]
Flying J	239	Homeland Industries	134	[illegible]	[illegible]
Foodmaker	166	Hondaille Industries	253	[illegible]	[illegible]
Formica	327	JM Huber	149	[illegible]	[illegible]
Frank Consol Enterprises	68	Roy M Huffington	156	[illegible]	[illegible]
Freedom Newspapers	319	Hughes Markets	280	[illegible]	[illegible]
Bob Frink Management	399	Humason-Keeling	387	[illegible]	[illegible]
Frisma	252	Hunt Corp	89	[illegible]	[illegible]
Furrs	58	Hy-Vee Food Stores	56	[illegible]	[illegible]
E&J Gallo Winery	113	Hyglaine Dressed Beef	272	[illegible]	[illegible]
Gates	111	Hyster	208	[illegible]	[illegible]
Gateway Foods	59	ICC Industries	167	[illegible]	[illegible]
General Automotive	353	Industrotherm Inds	358	[illegible]	[illegible]
General Felt Industries	29	Ingles Markets	140	[illegible]	[illegible]
Giant Eagle	47	Ingram Inds	68	[illegible]	[illegible]
Gilbane Building	62	Inland Real Estate	216	[illegible]	[illegible]
Gillett Group	130	Insetta Supermarkets	359	[illegible]	[illegible]
Glosser Brothers	306	Investors Management	326	[illegible]	[illegible]
GNB	306	Irvine Co	192	[illegible]	[illegible]
Golden State Foods	110	J&L Specialty Products	289	[illegible]	[illegible]
Goldman, Sachs & Co	13	Jerseymaid Milk Products	342	[illegible]	[illegible]
Golub	123	Jockey International	160	[illegible]	[illegible]
Gordon Food Service	354	Johnson & Higgins	166	[illegible]	[illegible]
Granite Construction	280	A Johnson & Co	120	[illegible]	[illegible]
Graybar Electric	38	SC Johnson & Son	31	[illegible]	[illegible]
B Green & Co	201	Jostal	355	[illegible]	[illegible]
Greenwood Mills	271	Joyce International	303	[illegible]	[illegible]
Grocers Supply Co	207	JUH	290	[illegible]	[illegible]
SJ Groves & Sons	221	Jupiter Industries	179	[illegible]	[illegible]
GSC Enterprises	220			[illegible]	[illegible]

The Largest Private Companies in the U.S.

Company	Rank	Company	Rank	Company	Rank
MA Mortenson	281	Ris Paper	330	Ti-Caro	380
Moyer Packing	284	Rock Island Refining	145	Ticor Insurance	147
Nash Phillips/Copus	224	Roger Williams Food	295	Touche Ross & Co	83
National Gypsum	52	Rodgers Co	390	Towers, Perrin, Foster & Crosby	314
NES	122	Roseburg Forest Products	235	Trailways	259
North Pacific Lumber	209	Rosenthal Cos	248	Trammell Crow	78
Northville Industries	293	Rugby Labs	325	Transammonia	117
Oklahoma Publishing	210	Sammons Enterprises	63	Triad America	156
Oppenheimer & Co	163	Schnuck Markets	115	Triangle Publications	157
Orasco	377	Schottenstein	242	Trump Organization	79
Pace Industries	26	Schreiber Foods	95	Tuscan Industries	331
Palm Beach	244	Schwan's Sales Enterprise	213	UIS	236
Pamida	211	Schwegmann Giant Supermarkets	225	Union Holdings	80
RB Pamplin Corp	323	SCI Holdings	158	United Coal	296
Pantry	294	Science Applications International	186	United Parcel Service	6
Paragon Group	187	SCOA Industries	56	United Van Lines	168
Parsons & Whittemore	257	Scoular	132	US Plywood	85
Parsons Corp	109	Scripps-Howard	90	USA Petroleum	297
Peat, Marwick, Mitchell & Co	36	Seven-Up	136	Valleydale Packers	81
CL Peck Contractor	262	JR Simplot	60	Vanguard Energy	282
Penske	258	Simpson Timber	116	Vantage Cos	84
Perdue Farms	93	Smith Barney, Harris Upham & Co	105	Vista Chemical	195
Phelps	212	Snyder General	196	Vitt Media International	367
Philadelphia Hide Brokerage	364	Southern Farm Bureau Casualty Ins Co	261	Walbridge, Aldinger	237
Pickens-Bond Construction	365	Southwire	179	Walton Monroe	304
PIE* Nationwide	135	Spalding & Evenflo	375	Warnaco	159
Piggly Wiggly Southern	164	AG Spanos Cos	200	Warren Equities	137
Pilgrim Pride	233	Sprague Resources	274	George E Warren	18
PMC	329	Steelcase	49	Wawa	372
Potamkin Cadillac	94	Stephens	134	Jervis B Webb	298
HC Prange	371	Steuart Investment	155	Wegmans Food Markets	103
Price Waterhouse	141	Stevedoring Group of Am	44	Weil Bros Cotton	332
Pride Refining	234	Stowe Mills	366	Weirton Steel	65
Providence Journal	240	Stroh Brewery	45	Western Auto	133
Publix Supermarkets	15	Summa	341	Western Petroleum	384
Quiktrip	275	Sundt	326	Westfield Cos	221
Racetrac Petroleum	197	Superior's Brand Meats	214	Wheaton Inds	243
Raley's	101	Sweet Life Foods	82	Wilbur-Ellis	238
Randall Stores	324	Swift Independent Holdings	12	Wilson Sporting Goods	368
Randall's Food Markets	139	Swinerton & Walberg	226	World Carpets	260
Rapid-American	33	Sybron	188	Worldmark Corp	369
Raymond Intl	198	Tang Industries	315	Worldwide Volkswagen	140
Readers Digest Association	48	Tauber Oil	86	WWF Paper	215
Red Owl Holdings	102	Taubman Co	313	Wyatt	104
Rentfield	172	Taubman Investment	203	Young & Rubicam	184
Republic Health	183	3 Beall Brothers 3	303	Arthur Young	61
Rich Products	138	Thrifty Oil	124	Youngs Market	227
Rinker Materials	333			HB Zachry	193

The Forbes/Wilshire 5000 Review

Edited by Steve Kichen


Market Value of Wilshire 5000: $2,440.5 billion as of 10/24/86
Wilshire 5000 equity index[1]
The total price of all stocks for which daily quotations are available, weighted by market value.
Dow Jones industrial average
The total price of 30 blue-chip industrial stocks, adjusted to reflect splits.
12-month closeup
Wilshire 5000 P/E*: 17.4
Dow Jones P/E*: 13.1
+1.1
+2.2
*Capitalization weighted
3000
2750
2500
2250
2000
1750
1500
1250
1000
'76 '77 '78 '79 '80 '81 '82 '83 '84 '85 '86
S O N D J F M A M J J A S

The Dow beat the market 2-to-1. But that was primarily because one Dow stock, Goodyear Tire & Rubber, jumped 8½ points in two weeks. Goodyear, which diversified into energy with the purchase of Celeron in 1983, was getting attention as a takeover candidate. Responding to this, it announced that it might restructure.

Dow Jones stocks Du Pont, Kodak, General Motors and Texaco had more modest two-week gains. Those advances coupled with the 24.3% increase in Goodyear pushed the equally weighted 30-stock Dow average to a 2.2% two-week gain. The capitalization-weighted NYSE, however, increased only 1.2%. And the cap-weighted Wilshire index of 5,800 stocks rose only 1.1%.

What about small companies? The Nasdaq posted a more modest two-week gain of 0.9%. But Amex shares ran counter to the market and fell 0.9%. For the last 52 weeks Amex-listed issues are up only 15.7%, compared with gains of 26.7% for NYSE and 23.2% for Nasdaq stocks.

Closeup On The Equity Markets

Performance of six leading indexes

Percent change	Wilshire 5000	Forbes 500[2]	Dow Jones industrials	NYSE Composite	Amex Market Value Index	NASDAQ Composite
in last 4 weeks	2.3	2.2	3.5	2.5	0.1	1.4
in last 52 weeks	25.8	22.2	35.1	26.7	15.7	23.2

Stock performance based on six key investor yardsticks

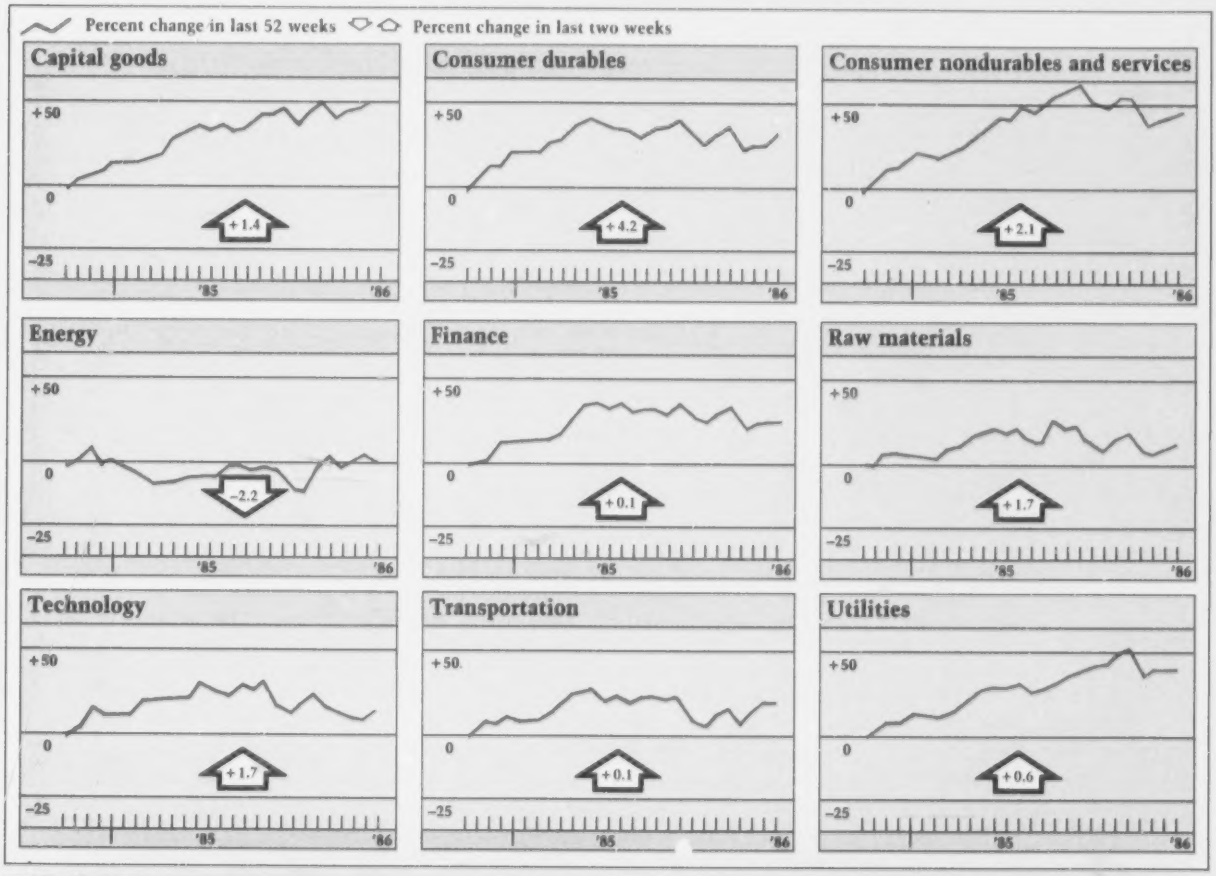
Percent change	Company size		Volatility[3]		P/E multiple		Dividend yield		Growth profile[4]		Share price	
	large	small	high	low	over 25	under 5	over 7.5%	none	high	low	over $40	under $4
in last 4 weeks	3.2	3.3	4.8	1.6	2.7	1.6	1.0	1.6	3.3	2.3	2.5	1.0
in last 52 weeks	30.3	42.7	62.5	32.3	22.0	35.7	25.5	40.9	52.6	38.6	37.6	27.7

[1]Wilshire index reflects price performance. It differs slightly from market value of outstanding stocks because of retirements of equity since index was created. [2]Based on sales. [3]A stock's sensitivity to overall market movement. High-volatility issues have wide price fluctuations, low-volatility issues are more stable. [4]A quantitative evaluation of a stock's growth image, determined by Wilshire Associates.

Note: All data for periods ending 10/24/86. Prepared by Wilshire Associates, Santa Monica, Calif.

Where The Action Is

Energy takes a breather. While investors were pushing up prices in eight of the nine Wilshire sectors, they had second thoughts about energy. During the two weeks ended Oct. 24 the average energy stock fell 2.2%. The biggest percentage declines were not in the major oil stocks but in smaller issues, such as Santa Fe Energy Partners, American Petrofina and Helmerich & Payne. Thanks to the sharp decline in oil prices during the first half of the year, this sector shows the poorest 52-week performance. Energy stocks are up only 0.7%, compared with 39% for consumer nondurables, the best group. But the tables have turned since the end of June: Energy is the only sector that has advanced (5.6%), while consumer nondurables suffered the sharpest loss, a decline of 11.5%.



What The Analysts Think

Utilities up, rails down. During the last two weeks analysts raised 1986 estimates for two sectors, capital goods and utilities. In the capital goods sector, estimates for heavy-equipment makers American Hoist & Derrick and Becor Western were raised significantly. But forecasts for transportation stocks were cut by 6.6%.

Forecasting the Forbes 500

Performance period	Average earnings per share	P/E
latest 12 months	$2.70	16.0
1986 estimates	3.22	13.4
1987 estimates	3.86	11.2

Rank based on change in estimate	Sector	Estimated 1986 EPS	Estimated 1986 P/E	% change in 1986 estimate in 2 weeks	% change in 1986 estimate in 4 weeks
1	Capital goods	$2.28	16.5	0.23%	-0.98%
2	Utilities	3.26	10.4	0.09	0.00
3	Consumer nondurables	2.05	16.4	-0.59	-0.82
4	Finance	3.19	10.9	-0.61	-1.31
5	Energy	2.04	15.6	-0.80	-1.64
6	Consumer durables	3.78	11.2	-0.83	-1.62
7	Raw materials	1.83	17.4	-1.06	-2.31
8	Technology	2.50	14.5	-2.31	-2.95
9	Transportation	1.33	21.1	-6.63	-9.69

Earnings projections are capitalization-weighted consensus estimates from over 2,000 security analysts. Data are compiled and updated continuously by the Institutional Brokers Estimate System (IBES), a service of Lynch, Jones & Ryan, a New York-based brokerage firm.

Note: All data for periods ending 10/24/86. Prepared by Wilshire Associates, Santa Monica, Calif.; IBES, a service of Lynch, Jones & Ryan, New York.

The Forbes/TUCS Institutional Portfolio Report

Edited by Steve Kichen

THE THIRD quarter was a difficult one for investors. The total return (including dividends) of the Wilshire index of 5,800 securities was a minus 7.7%. And how did professional equity managers do? They did worse, losing an average 8.7% of their clients' money (not counting fees charged for losing the money). In the rousing first quarter, by contrast, the pros looked smart. The market was up 14.4%, but institutional money was up a median 15.6%. The pros are fair-weather performers, it seems. They often outdo the averages in bull markets and underperform in bear markets.

These revelations come courtesy of Wilshire Associates' Trust Universe Comparison Service (TUCS), a survey of some 1,000 pension funds whose combined assets constitute about a fourth of the country's $1.6 trillion total pension assets.

It's not easy, of course, for the average pro to beat the market by a wide margin—or do much worse, either. That's because institutions make up more than 65% of the market's $2.4 trillion capitalization.

There were some winners in the losing third quarter. Portfolio managers who de-emphasized common stocks and bought bonds and money market funds had a better chance of coming out ahead. Fixed-income investments posted a median total return of 2.2%, vs. 2% for the Shearson Lehman bond index.

The table at right, "Segment performance and cash flows," shows where the institutions were placing their bets. (These figures are adjusted to remove the effect of changing security prices. If, for example, stocks are off 10%, then a 10% decline in an equity portfolio is reported as no shift of funds.) The managers did shift funds intelligently, moving 1.3% out of stocks in the last quarter and moving a like amount into bonds.

One striking fact: Institutions increased their cash hoards by 9.9%. This cash, of course, could go back into common stocks if portfolio managers become more optimistic about the prospects for the economy. The other significant change is that institutions added money (1%) to their pension funds, after seven quarters of drawing cash out of the funds *(see story, p. 94)*. Not too surprisingly, stocks that were less volatile than the market held up better during the third-quarter decline. See table below comparing returns with risk levels.

How different managers performed

Manager style	Total return: recent quarter	12 months	24 months[3]
Diversified	–5.3%	30.2%	22.9%
Growth	–10.3	30.3	21.0
Growth—emerging	–12.0	26.5	21.1
Market timer	–6.7	26.2	19.8
Sector rotator	–7.9	30.1	22.3
Value	–3.9	30.8	22.4

Where the institutions put their money

Segment	—Portfolio weighting— most recent quarter	previous quarter
Equity	54.2%	57.7%
Fixed income	33.0	30.9
Cash and equivalents	9.5	8.0
Convertibles	0.8	0.8
Other[1]	2.5	2.6

Equity portfolio characteristics

	Institutional portfolios	Wilshire 5000
Price/earnings ratio	16.9	15.6
Dividend yield	2.9%	3.3%
Beta[2]	1.02	1.06
Price/sales	1.03	1.02
Price/book	2.56	2.21

Segment performance and cash flows

Segment	—Most recent quarter— median total return	shift in institutional holdings	——Latest 12 months—— median total return	shift in institutional holdings
Equity	–7.5%	–1.3%	32.0%	–8.1%
Fixed income	2.2	1.3	19.1	0.3
Cash equiv	1.6	9.9	7.6	–11.9
Convertibles	–2.4	–2.2	22.3	–26.6
Other[1]	2.5	–4.3	13.4	–8.6
Total	–2.9	1.0	27.7	–4.1

Position changes: These securities had the greatest relative change in holdings over the last quarter

Security	Increase in holdings	Total quarter return	Security	Decrease in holdings	Total quarter return
Philip Morris	4.8%	–10.5%	SmithKline Beck	–1.7%	–18.9%
Amoco	4.5	9.2	McDonald's	–1.6	–22.4
Chevron	4.4	16.4	General Electric	–1.5	–10.6
Coca-Cola	1.8	–18.5	Dart & Kraft	–1.5	–14.2
NWA	1.6	3.5	Amer Home Prods	–1.2	–17.9
Emerson Electric	1.3	–6.7	Citicorp	–1.1	–15.2
Burroughs	1.3	15.0	PepsiCo	–1.1	–21.1
USG	1.3	–0.5	Corning Glass	–1.1	–33.7
May Dept Stores	1.3	–18.9	Wal-Mart Stores	–1.1	–19.0
Exxon	1.2	12.1	American Express	–1.1	–9.4

[1]Real estate, foreign investments, venture capital, guaranteed insurance contracts. [2]A measure of risk. A stock with a beta of 1.00 tends to move up or down at the same rate as the S&P's 500. [3]Figures for 24 months are annualized.

Note: Data for quarter ending 9/30/86. Prepared by the Trust Universe Comparison Service (TUCS®), a service of Wilshire Associates, Santa Monica, Calif.

Where the institutions are—and aren't

Most overweighted relative to Wilshire 5000			Most underweighted relative to Wilshire 5000		
	% of			% of	
Security	institutional universe	Wilshire 5000	Security	institutional universe	Wilshire 5000
Digital Equipment	1.1%	0.4%	Exxon	0.7%	2.3%
Philip Morris	1.0	0.5	IBM	2.8	4.4
General Re	0.6	0.2	AT&T	0.3	1.3
ITT	0.5	0.3	British Petroleum	0.1	0.8
Goodyear Tire & Rubber	0.4	0.2	Amoco	0.4	1.0
American Express	0.8	0.6	Shell Trans & Trading	0.1	0.6
AMR	0.4	0.1	Royal Dutch Pet	0.5	1.0
Squibb	0.4	0.2	General Electric	1.1	1.5
K mart	0.4	0.2	General Motors	0.8	1.2
American Intl Group	0.6	0.4	Allied-Signal	0.1	0.4

The institutions increased their holdings of three big oil companies: Amoco, Chevron and Exxon. As a group, however, energy stocks fell from 9.5% to 9.1% of the institutional portfolio during the third quarter. Portfolio managers also reduced their holdings of consumer nondurable issues by selling off the likes of SmithKline Beckman, McDonald's and Dart & Kraft. But that still leaves consumer nondurables at a hefty 28.7% of the typical pension stock portfolio. What were the institutions buying last quarter? Consumer durables, raw materials and technology. Holdings of Philip Morris Cos., an institutional favorite, increased another 4.8%.

Sector activity and top holdings

% of institutional portfolio: ■ most recent quarter ■ previous quarter

Capital goods	4.9% 5.1%	Consumer durables	5.2% 4.7%	Consumer nondurables	28.7% 29.2%
	total return		total return		total return
General Electric	–10.6%	General Motors	11.2%	Merck	5.3%
Emerson Electric	6.7	Ford Motor	–2.9	Eastman Kodak	–8.2
Westinghouse Electric	–1.5	Goodyear Tire & Rubber	7.0	Sears, Roebuck & Co	16.7
Caterpillar Tractor	23.7	Chrysler	–4.7	Wal-Mart Stores	19.0
Cooper Indus	0.4	Whirlpool	–23.1	Johnson & Johnson	–11.4
Energy	9.1% 9.5%	Finance	12.6% 12.7%	Raw materials	12.6% 12.4%
	total return		total return		total return
Exxon	12.1%	American Express	–9.4%	El du Pont de Nemours	–2.8%
Royal Dutch Petroleum	13.0	General Re	–8.0	Allied-Signal	–8.4
Mobil	20.8	American Intl Group	–4.3	Dow Chemical	–5.7
Atlantic Richfield	13.2	Aetna Life & Casualty	–4.3	Monsanto	–8.0
Texaco	12.3	Citicorp	–15.2	Waste Management	–3.2
Technology	15.7% 15.2%	Transportation	4.2% 4.0%	Utilities	7.0% 7.2%
	total return		total return		total return
IBM	–7.4%	AMR	2.9%	Pacific Telesis Group	–4.0%
Digital Equipment	4.8	UAL	4.4	GTE	–0.9
ITT	–10.1	Norfolk Southern	–9.1	Southwestern Bell	–1.7
Boeing	–14.8	CSX	–15.2	Nynex	–6.9
Minnesota Mng & Mfg	–10.8	Union Pacific	0.5	American Info Tech	–2.4